

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. - 20. (Canceled)

21. (New) A system for determining locations of freight containers in a freight yard comprising:

a plurality of remote receivers attachable to said freight containers in said freight yard for receiving global positioning signals from a global positioning satellite system, each remote receiver including a transmitter;

a base station;

a communication network for intermittently communicating global positioning data between said remote receiver transmitters in said freight yard and said base station;

reference receiver means positioned at a known position for receiving signals from the global positioning satellite system to determine a reference apparent position and for calculating an error correction based on the difference between the known position and the apparent position;

the base station including means for receiving global positioning data of a remote receiver from said communication network, means for receiving said error correction from said reference receiver means, means for deriving a corrected location of said remote receiver using said error correction and said global positioning data, and means for displaying the location of said remote receiver in said freight yard.

22. (New) The system of claim 21, a number of said remote receivers including a microprocessor for determining the position of a respective remote receiver using said global positioning signals

23. (New) The system of claim 21, said base station including a microprocessor for accepting global positioning signals from a number of said remote receivers and for determining the location of the respective remote receiver.

24. (New) The system of claim 21, a number of said remote receivers including means for calculating a correct position of a respective remote receiver in said freight yard using said error correction.

25. (New) The system of claim 21, said base station being coupled to said reference receiver means and including means for applying the error correction to the global positioning data of a remote receiver and determining a correct position of a respective remote receiver in said freight yard.

26. (New) The system of claim 21, a number of said remote receivers comprising a GPS antenna and amplifier, where the global positioning signals comprise timing data which are amplified and transmitted to the base station.

27. (New) The system of claim 21, a number of said remote receivers including a battery for supplying power to the remote receiver.

28. (New) The system of claim 27, said remote receivers including a timer means for initiating periodic operation of the remote receiver to receive global positioning signals and to transmit data to the base station.

29. (New) A method for determining freight container locations in a freight yard comprising:

attaching a number of receivers for GPS signals to a number of freight containers in said freight yard;

intermittently operating each receiver to transmit an identification and position;

receiving said identification and position at a base station; and

recording the identification and position of said receivers in said freight yard.

30. (New) The method of claim 29, including applying a correction signal to determine a more accurate position of said receivers in said freight yard.

31. (New) The method of claim 29, said intermittently operating step including a timer which periodically initiates said transmission.

32. (New) The method of claim 29, said intermittently operating step including a motion sensor which initiates said transmission.
33. (New) The method of claim 29, including a database for recording the identification and position.
34. (New) The method of claim 33, including accessing said database to determine a present position of a freight container, locating the freight container, and moving the freight container from said present position.
35. (New) The method of claim 29, including operating one or more pseudolites in said freight yard and operating at least some of the GPS receivers to use the pseudolite signals to determine a position of a respective GPS receiver.
36. (New) The method of claim 29, including operating a battery to power a GPS receiver.
37. (New) A system for determining locations of freight containers in a freight yard comprising:
- a plurality of remote receivers attachable to said freight containers in said freight yard for receiving global positioning signals from the global positioning satellite system, each remote receiver including a transmitter;
 - a base station;
 - a communications network for intermittently communicating global positioning data between said remote receiver transmitters and said base station;
 - a reference receiver positioned at a known position for receiving signals from the global positioning satellite system to determine a reference apparent position and for calculating an error correction based on the difference between the known position and the apparent position; and
 - the base station including a processor for receiving global positioning data of a remote receiver from said communications network, for applying said error correction from said reference receiver, and for deriving a corrected location of said remote receiver using said error correction and said global positioning data.